

SECTION VI.—BIBLIOGRAPHY.

RECENT ADDITIONS TO THE WEATHER BUREAU LIBRARY.

C. FITZHUGH TALMAN, Professor in Charge of Library.

The following have been selected from among the titles of books recently received as representing those most likely to be useful to Weather Bureau officials in their meteorological and seismological work and studies:

Abbot, C[harles] G[reeley].

Arequipa pyrheliometry. Washington. 1916. 24 p. 24 $\frac{1}{2}$ cm. (Smithsonian miscellaneous collections, v. 65, no. 9.) [Summarized in this issue of the REVIEW, p. 63.]

Barbour, T.

Some remarks upon Matthew's "Climate and evolution." With supplemental note by W. D. Matthew. New York. 1916. 15 p. 24 $\frac{1}{2}$ cm. (Annals of the New York academy of sciences, v. 27, pp. 1-15.)

Batchelor, L. D., & West, F. L.

Variation in minimum temperatures due to the topography of a mountain valley in its relation to fruit growing. Logan, Utah. 1915. 27 p. 23 cm. (Utah agricultural experiment station. Bulletin no. 141.)

Canada. Department of the interior. Irrigation branch.

Report on the climatic and soil conditions in the Canadian Pacific railway company's irrigation project, western section (near Calgary, Alberta). Ottawa. 1915. 24 p. 24 $\frac{1}{2}$ cm. (Irrigation series, bulletin no. 3.)

Canada. Meteorological service.

Upper air investigations in Canada. Part 1. Observations by registering balloons, by J. Patterson. Ottawa. 1915. 127 p. 25 cm. (M. S. 51.)

Chile. Instituto central meteorológico y geofísico.

Anuario meteorológico de Chile. Segunda parte (resúmenes). 1913. [In Spanish and German.] Santiago de Chile. 1915. vi, 134 p. plates. 37 $\frac{1}{2}$ cm. (Publicaciones, no. 15.)

Valores horarios de elementos meteorológicos en Los Andes 1911 y 1912. [In Spanish and German.] Santiago de Chile. 1915. 3 p. l., 81 p. plates. 37 $\frac{1}{2}$ cm. (Publicaciones, no. 16.)

Valores horarios de los elementos meteorológicos, temperatura del suelo y dispersión eléctrica en Santiago 1914. [In Spanish and German.] Santiago de Chile. 1915. 2 p. l., 91 p. plates. 37 $\frac{1}{2}$ cm. (Publicaciones, no. 17.)

Clark, A. L.

Introduction to the study of cloud formations. (In Queen's quarterly, Queen's University. Kingston, Canada. v. 23, no. 3. Jan.-Mar., 1916. p. 248-260. plates.)

Cocks, Gerhard H.

Experimental studies of the effect of various atmospheric conditions upon the upper respiratory tract [conducted under the auspices of the New York State commission on ventilation]. 48 p. 23 $\frac{1}{2}$ cm. (Read before the American laryngological, rhinological, and otological society, at the 21st annual meeting, Chicago, June, 1915.)

Davos. Meteorologische Station.

Jahres-Uebersicht der Beobachtungen, 1915. Davos. [1916.] 3 leaves. 30 $\frac{1}{2}$ x 46 cm. (Anhang zu den vom Kurverein Davos herausgegebenen Monatswetterkarten.)

Day, William H.

Lightning; its nature, and the efficiency and methods of lightning protection. (In Journal, Royal astronomical society of Canada. Toronto. March, 1916. v. 10, p. 121-133.)

Fetherston, J. T.

Snow removal in New York City. (In Municipal engineers journal. New York. Nov., 1915. v. 1, p. 339-381.)

Huntington, Ellsworth.

A neglected factor in race development. p. 167-184. 23 cm. (Reprinted from the Journal of race development, v. 6, no. 2, October, 1915.) [Treats of climatic variations in relation to race development.]

Weather and civilization. 21 p. plates. (Reprinted from the Bulletin of the Geographical society of Philadelphia, v. 14, no. 1, January, 1916.)

Klotz, Otto.

Seismological tables. Ottawa. 1916. 2 p. 1., 19-61 p. 2 pl. 29 cm. (Publications of the Dominion observatory, v. 3, no. 2.)

Kimball, Herbert H.

Daylight illumination, and the intensity and duration of twilight. 17 p. 23 cm. (Read at a meeting of the Pittsburgh section of the Illuminating engineering society, Cleveland, Ohio, Feb. 18, 1916.) [See this REVIEW, January, 1915, 44:12-13.]

Lewis, Merwyn R.

Solar halo of May 20, 1915. (In Proceedings, Delaware county institute of science. Media, Pa. 1916. v. 7, p. 49-66.)

Marbitz, Heinz.

Phänologische Beobachtungen in Pommern. Greifswald. 1914. p. 369-383. 22 cm. (S.-A. aus dem 14. Jahresbericht der Geographischen Gesellschaft zu Greifswald 1913/14.)

Masciari-Genoese, F.

Traffato di costruzioni antisismiche, preceduto da un corso di sismologia. Milano. 1915. xxviii, 1004 p. illus. plates. 24 cm.

Norway. Meteorologiske institut.

Veiledning i. Meteorologiske iagttagelser i. Kristiania. 1915. 47 p. tab. 23 cm.

Palmer, George T.

A new sampling apparatus for the determination of aerial dust. p. 54-55. 24 $\frac{1}{2}$ cm. (Reprinted from American journal of public health, Boston, v. 6, no. 1.)

An outline of the activities of the New York State commission on ventilation for the year 1915. 18 p. 25 cm. (Presented at the annual meeting of the American society of heating and ventilating engineers, New York, Jan. 20, 1916.)

The part played by temperature in school-room ventilation. 8 p. 24 $\frac{1}{2}$ cm. (Reprinted from School and society, v. 2, no. 28, July 10, 1915.)

Philippine islands. Weather bureau.

Annual report, 1914. Part 1-2. Manila. 1915. 140 p. 29 $\frac{1}{2}$ cm.

Saderra Masó, Miguel.

Historia del Observatorio de Manila, 1865-1915. Manila. 1915. 210 p. plates. 27 cm.

Shreve, Forrest.

The vegetation of a desert mountain range as conditioned by climatic factors. Washington. 1915. 112 p. 36 pl. 25 $\frac{1}{2}$ cm. (Carnegie institution of Washington. Publication no. 217.)

Stonyhurst college observatory.

Results of meteorological, magnetical, and seismological observations, 1915. Blackburn. 1916. xiii, 52 p. 18 $\frac{1}{2}$ cm.

U. S. Lighthouse service.

The United States Lighthouse service, 1915. Washington. 1916. 94 p. 23 cm. [Fog signals, p. 40-46.]

RECENT PAPERS BEARING ON METEOROLOGY AND SEISMOLOGY.

C. FITZHUGH TALMAN, Professor in Charge of Library.

The subjoined titles have been selected from the contents of the periodicals and serials recently received in the Library of the Weather Bureau. The titles selected are of papers and other communications bearing on meteorology and cognate branches of science. This is not a complete index of the meteorological contents of all the journals from which it has been compiled. It shows only the articles that appear to the compiler likely to be of particular interest in connection with the work of the Weather Bureau.

American society of civil engineers. Proceedings. New York. v. 42. March, 1916.

Binckley, George S., & Lee, Charles H. Suggested changes and extensions of the United States Weather bureau service in California. Discussion by Fred. H. Tibbets. p. 379-382.

Duryea, Edwin, Jr., & Haehl, H. L. A study of the depth of annual evaporation from Lake Conchos, Mexico. Discussion by Charles W. Comstock. p. 383-402.

Eakin, H. M., & Hill, John W. Discussion on [the Progress report of the Special committee on] floods and flood prevention. p. 435-441.

- Geographical review. New York. v. 1. no. 3. March, 1916.*
Huntington, Ellsworth. Climatic variations and economic cycles. p. 192-202.
- Jefferson, Mark. Aridity and humidity maps of the United States. p. 203-208.
- Meteorological society of Japan. Journal. Tokio. 35th year. February, 1916.*
Nakamura, Saemontaro. On the time curve of the earthquake waves for near earthquake. First report. p. 3-8.
Isida, M. Long-range forecast of the winter air temperature. p. 9-10. [Abstract.]
- Nature. London. v. 97. 1916.*
Heath, A. E. Ground rainbows. p. 5-6. (Mar. 2.)
Whitmell, C. T. Ground rainbows. p. 34. (Mar. 9.)
- Scientific American supplement. New York. v. 81. March 11, 1916.*
Waidner, C. W., Dickinson, H. C., & Crowe, J. J. Ocean temperatures in the vicinity of icebergs. p. 166-167. [Abstract from Bull., Bureau of Standards.]
- Tōhoku imperial university. Science reports. Sendai. 1st ser. v. 4. no. 5. 1915.*
Hondo, Kōtarō. On a pluviograph, recording the intensity of rainfall. p. 333-338.
- Satō, Shinzō. On the diurnal variation of underground temperature. p. 393-405.
- Tōkyō mathematico-physical society. Proceedings. Tōkyō. 2d ser. v. 8. February, 1916.*
Terada, Torahiko. On the distribution of the cyclonic precipitations. p. 382-384. [Abstract.]
- Archives des sciences physiques et naturelles. Géologie. Tome 41. 15 janvier 1916.*
Birkeland, R. Les rayons corpusculaires du soleil qui pénètrent dans l'atmosphère terrestre sont-ils négatifs ou positifs? p. 22-37.
- Jardin (Le), Paris. 28 année. 1914.
Beckerich, Abel. Les niagaras électriques. p. 203-205.
- Jardin (Le), Paris. 29 année. 1915.
Beckerich, Abel. Les niagaras électriques. p. 272-273; 281-283; 290-291.
- Nature. Paris. 44 année. 11 mars 1916.*
Lotti, B[ernadine]. Le tremblement de terre de la Marsica dans l'Appennin central. p. 161-163.
- Petermanns Mitteilungen. Gotha. 61. Jahrgang. November-Heft. 1915.*
Fröhlich, Jakob. Entwicklungsformen und Verbreitung des Büsserschnees. p. 423-427.
- Prometheus. Leipzig. 27. Jahrgang. 12. Februar 1916.*
Zöllner, "Fossile Regentropfen", p. 319. [A new explanation of so-called "fossil raindrops."]
- Wetter. Berlin. 33. Jahrgang. Februar 1916.*
Brand, W. Reichweite des Geschützdonners nach Kriegsbeobachtungen. p. 25-32.
- Dreis, [Johannes]. Prinzipien und Erscheinungen der Wolkenmetamorphose. p. 32-37.
- Krebs, Wilhelm. Das Rätsel von Spichern und seine Lösung. p. 41-44.
- Zeitschrift für Gletscherkunde. Leipzig. Band 9. Januar 1916.*
Klute, F. Beobachtungen über Zackenfirn (Büsserschnee) und dessen Entstehung am Klimandscharo. p. 289-305.
- Italy. Ufficio centrale di meteorologia e di geodinamica. Rivista meteorico-agraria. Roma. anno 36. Novembre 1915.*
Veneziani, Arnoldo. Le oscillazioni della temperatura nel clima di Girenti. p. 1167-1186. (1. decade.)
Mina, Luigi. Formola per il calcolo delle altitudini mediante la densità dell' aria. p. 1225-1232. (2. decade.)
- Pontificia accademia romana dei Nuovi Lincei. Atti. Roma. anno 68. 1914-1915.*
Galli, Ignazio. Fulmini globulari nel 1914. Nota 13. p. 177-189.
- Società meteorologica italiana. Bollettino bimestrale. Torino. ser. 3. v. 34. Aprile-maggio 1915.*
Negro, Carlo. Nuovi appunti sulla formazione del gelicidio. p. 21-23.
- Mondello, Ugo. Sui rombi sismici avvertiti a Livorno nel marzo e nel gennaio 1914. p. 23-25.
- Galli, Ignazio. Fulmini globulari nel 1914. p. 25-26. [Abstract.]
Negro, Carlo. Indovinelli e curiosità nel campo della meteorologia. p. 27-28.
- Società sismologica italiana. Bollettino. Modena. v. 19. no. 3-4. 1915.*
Oddone, Emilio. Gli elementi fisici del grande terremoto Marsicano-Fucense del 13 gennaio 1915. Le osservazioni macrosismiche. p. 71-207.